

THOMSON

DELPHION

My Account

Products

My Account | Products

## The Delphion Integrated View: INPADOC Record

Buy Now: [More choices](#)

Tools: [Add to Work File](#)

[Create new Work](#)

View: Jump to: [Top](#)

Go to: [Default](#)

Title:

**TW0455938B: WAFER POLISHING STOP DETECTION METHOD AN  
POLISHING STOP DETECTION DEVICE**

Country:

TW Taiwan

Kind:

B Patent

Inventor:

IDE, SATORU; , Japan  
TANAKA, KIYOSHI; , Japan  
ITO, TOSHIHIRO; , Japan

Assignee:

NIKON KK, Japan  
[News, Profiles, Stocks and More about this company](#)

Published / Filed:

Sept. 21, 2001 / Dec. 9, 1999

Application

TW1999088121563

Number:

IPC Code:

H01L 21/304; B24B 37/04;

ECLA Code:

None

Priority Number:


Dec. 10, 1998 JP1998000368466

Abstract:

A wafer polishing stop detection method and polishing stop detection device which provides the method for detecting CMP polishing stop by polishing surface status index of polishing wafer in more precision. The solution of the wafer polishing stop detection method is irradiating the light from the light source; collecting the reflection on the color recognition sensor using fiber optics for light color component recognition; recognizing the color components of the tracing material on the pre-polished wafer using the color recognition sensor; displaying an "on" status if the color components are recognized and an "off" status if the color components are not recognized; digitally displaying the "on" and "off" periods on the horizontal axis during wafer polishing from a point (except the center) on the rotating wafer surface irradiated by the color recognition sensor; detecting the integral ( $\int$ ) for the specified period for "off" pulse width in digital display so that when the detected integral ( $\int$ ) can be consistent with the integral value ( $\int$ ) for the specified period for "off" pulse width of predetermined best wafer polishing stop; defining it as the wafer polishing stop.

BEST AVAILABLE COPY

Family:

| Buy PDF   | Publication    | Pub. Date      | Filed         | Title  |
|---|----------------|----------------|---------------|--|
|   | US6342166B1    | Jan. 29, 2002  |               |  |
|  | US6342166      | Jan. 29, 2002  | Dec. 6, 1999  | Method of detecting end point of p wafer and apparatus for detecting polishing |
|   | TW0455938B     | Sept. 21, 2001 | Dec. 9, 1999  | WAFER POLISHING STOP DETE METHOD AND POLISHING STOP DEVICE                     |
|   | KR0048040A     | July 25, 2000  | Dec. 9, 1999  | METHOD FOR DETECTING POLI POINT OF WAFER AND APPARA DETECTING THE POLISHING EN |
|   | JP2000183002A2 | June 30, 2000  | Dec. 10, 1998 | METHOD AND DEVICE FOR DET WAFER POLISH END-POINT                               |

5 family members shown above

Other Abstract Info:

DERABS G2000-486551



[Nominate this for](#)